A fruit wedge containment device having a bottle rim coupling component and a wedge containment arm. The bottle rim coupling component is shaped for securing the containment device to a rim of a bottle. The containment arm extends angularly downward from a lower, interior end of the rim coupling component. The wedge containment device is secured to the rim of the bottle. A fruit wedge is inserted into the bottle, being secured between the interior surface of a neck of the bottle and the containment arm. A hook can optionally be formed at the distal end of the containment arm. Alternatively, a single hook, a series of hooks, or any other frictional feature can be incorporated along the containment arm for aiding in holding the fruit wedge in place. A promotional image can be provided on the device, such as via a promotional medallion.
FRUIT WEDGE CONTAINMENT Clip FOR BEVERAGE BOTTLE

FIELD OF THE INVENTION

[0001] The present disclosure generally relates to an apparatus and method for containing a fruit wedge proximate a bottle spout. More particularly, the present disclosure relates to a clip that secures to a rim of a bottle, the clip comprising a cantilevered arm for retaining a fruit wedge against an inner sidewall of a bottle proximate the bottle opening.

BACKGROUND OF THE INVENTION

[0002] Fruit wedges have been introduced into drinks for both decorative purposes as well as flavoring adjustments. Fruit wedges are defined as any cut portion of a fruit for use in adorning and/or flavoring a beverage. Fruit wedges are normally cut into wedge shaped portions of a sphere, but can be cut into cubes or any other shape.

[0003] One commonly used means for introducing the fruit wedge is by slicing the fruit center and placing the slice of the wedge over the lip of the bottle. This is known to cause interference when the drinking party is consuming the beverage. Fruit contains an acid, which can irritate a person’s skin when in contact with the fruit. By placing the fruit onto the rim of the bottle, the location significantly increases the likelihood of the drinking party contacting the fruit wedge, thus the acid contacting the consumer’s skin.

[0004] Several embodiments are taught to relocate the fruit wedge away from the rim of the bottle.

[0005] The first means is to simply insert the fruit wedge into the bottle, and since the neck of the bottle is normally tapered, the fruit wedge falls into and floats on the beverage. This allows the fruit juice and bitter flavor from the rinds to saturate into the drink, which provides a different flavor when compared to passing the drink across the fruit wedge. When passing the fluid across the fruit wedge, the drink obtains a consistent and more desirable flavoring.

[0006] A second embodiment incorporates a fruit slice receptacle within a neck of the bottle. This requires rettooling for bottles. The design further requires that the fruit slice be compressed while it is being inserted through the rim of the bottle. This releases the fruit juices into the drink.

[0007] Another known embodiment encapsulates a fruit wedge within a porous material, the encapsulating body comprising a tether, which is secured to an upper portion of the bottle. This configuration allows the fruit wedge to move within the bottle, including a potential for impeding the flow of the drink while the person is consuming the beverage.

[0008] Yet another embodiment, an additive holder is provided. The additive holder is sealed and stored within an upper portion of a bottle. The user can remove the seal from the additive container and mix the enclosed additives with the beverage. The additive holder is generally removed prior to consumption of the beverage.

[0009] Alternately, a citrus squeezer is known, wherein the citrus squeezer is secured to the rim of a bottle, a slice of fruit is inserted into the apparatus, and the user squeezes the sides of the apparatus to extract the juice from the fruit slice. This apparatus is removed prior to consumption of the beverage. Further, the process mixes the fruit juice with the beverage prior to consumption, providing a higher concentration of the fruit juice within the beverage as compared to passing the drink across the fruit wedge just prior to consumption.

[0010] Therefore, a fruit wedge containment device, which limits the transfer of fruit juice and moreso, the acids from the rind/skin to a beverage without causing irritation to the consumer or interfering with the dispensing of the fluid, is needed.

SUMMARY OF THE INVENTION

[0011] The present disclosure is generally directed to a device for holding a fruit wedge proximate an opening of a bottle.

[0012] In some embodiments, the fruit wedge containment device may include:

[0013] a bottle rim coupling component; and

[0014] a cantilevered arm extending downward at an angle sufficient for compressing a fruit wedge against an interior wall of a neck of a bottle.

[0015] In another aspect, the present invention can further comprise a hook formed in a distal end of the cantilevered arm.

[0016] While in yet another aspect, the hook can be provided at any reasonable location along the length of the cantilevered arm, including projecting from a major surface or along an edge for aiding in gripping the fruit wedge. It is also understood that a plurality of hooks or other frictional shape can be incorporated along the cantilevered arm.

[0017] In still another aspect, bottle rim coupling component comprising “U” shaped feature.

[0018] In yet another aspect, the bottle rim coupling component comprising round shaped feature having a rotational surface that is greater than 180 degrees for securing the apparatus to a rounded rim of the bottle.

[0019] In a still further aspect, the apparatus further comprises a surface for placement of a promotional image.

[0020] In another aspect, the surface for placement of a promotional image is provided as an enlarged component, having a surface that is significantly wider than the general shape of the other components of the device.

[0021] Continuing with another aspect, the promotional image component is incorporated into the device, extending from the bottle rim coupling component.

[0022] In a still further aspect, the promotional image component extends from an exterior portion of the bottle rim coupling component, placing the promotional image component on an exterior of the bottle.

[0023] In yet another aspect, the bottle rim coupling component is shaped such to contour to a threadless rim of a bottle.

[0024] With another aspect provides the bottle rim coupling component in a circular ring shape having a cylindrical projection extending downward from an internal edge of the ring. The downward projection engages with the interior edge of the bottle opening, extending into a neck of the bottle.

[0025] In another aspect, the device is formed having a cross sectional shape that is selected from a group consisting of:

a. A rectangular cross sectional shape,
b. A circular cross sectional shape,
c. An oval cross sectional shape,
d. A “C” shaped cross sectional shape,
e. A “D” shaped cross sectional shape, and
f. A combination of any two or more members thereof.
In still another aspect, the device further comprising a vertical component extending downward from the bottle rim coupling component, which is seated against an interior wall of the bottle, having the cantilevered arm extending from a lower end of the vertical component. The vertical component being provided to aid in applying a containment force to the fruit wedge.

While in another aspect, the present invention includes a method of containing a fruit wedge proximate a bottle opening wherein the method applies a holding force to a fruit wedge securing the fruit wedge against the interior surface of the neck of a bottle. The holding force is provided via a cantilevered arm, which is secured to a rim of the bottle.

In yet another aspect, a second protrusion is incorporated along the cantilevered arm, the second protrusion acting in conjunction with the distal hook providing the functionality of a bottle opener.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention will now be described, by way of example, with reference to the accompanying drawings, where like numerals denote like elements and in which:

FIG. 1 presents an isometric view of a fruit wedge containment device as viewed from an interior side of the device;

FIG. 2 presents an isometric view of the fruit wedge containment device of FIG. 1 as viewed from an exterior side of the device;

FIG. 3 presents a top view of the fruit wedge containment device of FIG. 1;

FIG. 4 presents an elevation view of the exterior side of the fruit wedge containment device of FIG. 1;

FIG. 5 presents an elevation view of the interior side of the fruit wedge containment device of FIG. 1;

FIG. 6 presents a bottom view of the fruit wedge containment device of FIG. 1;

FIG. 7 presents a first side view of the fruit wedge containment device of FIG. 1;

FIG. 8 presents a second side view of the fruit wedge containment device of FIG. 1;

FIG. 9 presents a sectional elevation view of the fruit wedge containment device shown being used within a bottle;

FIG. 10 presents an isometric view of the fruit wedge containment device installed upon a rim of a bottle;

FIG. 11 presents an isometric view of a fruit wedge containment device incorporating a second protrusion is incorporated along the cantilevered arm, the second protrusion acting in conjunction with the distal hook providing the functionality of a bottle opener; and

FIG. 12 presents an isometric view of an alternate exemplary embodiment of a fruit wedge containment device incorporating a rim mounting ring and a frictional fruit securing feature.

Like reference numerals refer to like parts throughout the various views of the drawings.

DETAILED DESCRIPTION OF THE INVENTION

The following detailed description is merely exemplary in nature and is not intended to limit the described embodiments or the application and uses of the described embodiments. As used herein, the word "exemplary" or "illustrative" means "serving as an example, instance, or illustration." Any implementation described herein as "exemplary" or "illustrative" is not necessarily to be construed as preferred or advantageous over other implementations. All of the implementations described below are exemplary implementations provided to enable persons skilled in the art to make or use the embodiments of the disclosure and are not intended to limit the scope of the disclosure, which is defined by the claims. For purposes of description herein, the terms "upper," "lower," "left," "rear," "right," "front," "vertical," "horizontal," and derivatives thereof shall relate to the invention as oriented in FIG. 1. Furthermore, there is no intention to be bound by any expressed or implied theory presented in the preceding technical field, background, brief summary or the following detailed description. It is also to be understood that the specific devices and processes illustrated in the attached drawings, and described in the following specification, are simply exemplary embodiments of the inventive concepts defined in the appended claims. Hence, specific dimensions and other physical characteristics relating to the embodiments disclosed herein are not to be considered as limiting, unless the claims expressly state otherwise.

A fruit wedge containment device 100 is presented via a plurality of views in FIGS. 1 through 8. The fruit wedge containment device 100 is formed having two primary components: a containment arm portion 110 and a bottle rim coupling component 120. The bottle rim coupling component 120 is provided for coupling the fruit wedge containment device 100 to a bottle rim portion 210 of a beverage bottle 200 (FIGS. 9 and 10). The containment arm portion 110 extends from the bottle rim coupling component 120. The fruit wedge containment device 100 is preferably fabricated of a molded, bendable plastic (or similar) material allowing the fruit wedge containment device 100 to flex as required for use. It is understood that other pliant materials, such as metal, plastic coated metal, glass impregnated plastic, composites, wood, and the like can be used. The fruit wedge containment device 100 can be fabricated such to be disposable or of a material that can be washed/disinfected for reuse. The bottle rim coupling component 120 is formed, having a shape that contours to the bottle rim portion 210. The bottle rim coupling component 120 can include a rim clip feature 124 forming a bottle rim receiver 122. The rim clip feature 124 is preferably in a rounded or semi-rounded shape having a circumference that is greater than 180 degrees. The rim clip feature 124 can be in any reasonable shape, including an inverted "U", a partial "D", a rotated "C" and the like. Alternatively, a rim clip feature 124 can be of a circular shape, which engages with the entire bottle rim 212 (FIGS. 9 and 10) or around the external surface of the neck of the beverage bottle 200. A vertical spring component 116 extends downward from an interior side of the rim clip feature 124 and a rim clip extension 126 extends downward from an exterior side of the rim clip feature 124. The two bottle gripping member components 116, 126 are incorporated to aid in providing a spring cantilevered force (referenced by arrow C) to the distal end of the containment arm 114. The distance formed between the two bottle gripping member components 116, 126 is such to ensure the bottle rim receiver 122 snaps onto and grips the bottle rim 212.

The containment arm portion 110 includes a containment arm 114 having an optional hook 112 formed at a distal end thereof. The cross sectional shape of the containment arm 114 can be rectangular (as shown), circular, oval, "D" shaped, or any other reasonable shape allowing the desired flexure of the containment arm 114. The containment
arm 114 can have a width continuing from the width of the rim clip feature 124 or broadens as illustrated. The width of the containment arm 114 can be determined by a variety of factors, including rigidity of the containment arm 114, fit for insertion into the bottle 200, the option for placement of promotional information along the surface of the arm 114, and the like. The containment arm 114 can alternately include a hook or series of hooks at any reasonable location along the length of the cantilevered arm 114, including projecting from a major surface or along an edge for aiding in gripping the fruit wedge. The hook 112 can have a planar end (as shown), be shaped incorporating two tapered edges forming a central point, include a series of teeth, and the like, to aid in gripping a fruit wedge 220 (FIGS. 9 and 10). It is also understood that a plurality of hooks or any other reasonable frictional shape can be incorporated along the cantilevered arm 114.

[0052] The bottle rim coupling component 120 includes the rim clip feature 124 as previously presented. The bottle rim coupling component 120 can optionally include a secondary rim member contour 128 for contouring to a secondary rim feature 216 (FIGS. 9 and 10) of the bottle rim portion 210. The secondary rim feature 216 would be provided along a lower end of the rim clip extension 126.

[0053] It is desirable to maintain low costs for the establishments serving food and beverages. One means for reducing costs is to supplement costs by providing a means for marketing other companies, products, services, and the like. In turn, the advertising party provides revenue to the establishment, provides the devices to the establishment, and the like, to aid in reducing the overall costs of business. The fruit wedge containment device 100 can include a promotional medallion 130 having a promotional surface 132 for placement of promotional information 134. The promotional information 134 can include a name, logo, catch phrase, coupon, advertisement, and the like. The promotional medallion 130 can be of any reasonable shape, including round (as shown), rectangular, contouring to a shape resembling the promotional item, and the like. The promotional information can be presented via a printing, a bossing (raised surface), an embossing (recessed surface), applied via a label, an insertion, and the like.

[0054] The method of use of the fruit wedge containment device 100 is presented in FIGS. 9 and 10. The fruit wedge containment device 100 is coupled to a bottle rim portion 210 of a beverage bottle 200 by snapping the rim clip feature 124 over a bottle rim 212 of the bottle rim portion 210. The rim clip feature 124 forms a bottle rim receiver 122 for receiving the bottle rim 212. A rim clip extension 126 extends downward from the exterior end of the rim clip feature 124. The vertical spring component 116 extends downward from the interior end of the rim clip feature 124. The vertical spring component 116 and the rim clip extension 126 increase the stability of the fruit wedge containment device 100 during use. The rim clip extension 126 is provided to engage with a rim recession 214 located adjacent to the bottle rim 212. The containment arm 114 extends angularly from a lower edge of the vertical spring component 116 and is of sufficient length to provide a spring cantilevered force (referenced by arrow C) to the distal end of the containment arm 114. The optional hook 112 or other frictional features can be incorporated at the distal end of the containment arm 114 to aid in ensuring the fruit wedge 220 does not slip into the beverage. Bottles 200 have a variety of configurations for the bottle rim portion 210. The illustration presents a configuration having a secondary rim feature 216, such as a bottle cap receiving thread. The fruit wedge containment device 100 can include a secondary rim member contour 128 for accommodating the secondary rim feature 216.

[0055] When the fruit wedge 220 is inserted through the bottle rim portion 210, into the interior of the beverage bottle 200, the fruit wedge 220 causes the containment arm 114 to bend (referenced via the motion of arrow B). The original shape is presented in phantom (dashed lines), with the flexed shape being shown (solid lines). The flexure creates the spring cantilevered force C, which holds the fruit wedge 220 against the interior surface 204 of the bottle neck 202. It is understood the shape of the containment arm 114 can be modified to accomplish the same results.

[0056] A central protrusion 142 can be formed along the containment arm 114 as illustrated in FIG. 11. The central protrusion 142 can be shaped providing a centrally located hook 144 and a bottle opener grip 146. The centrally located hook 144 provides a second feature for securing the fruit wedge 220 in position. The bottle opener grip 146 is used in conjunction with the hook 112 as a bottle opener bottle opener 140. The containment arm 114 would be fabricated of a material that matches the required rigidity of the bottle opener 140. At least one aperture 118 can be provided through the containment arm 114 as a means for allowing fluid to pass through the containment arm 114. The illustration presents a circular shaped aperture 118, whereas it is understood the aperture 118 can be of any shape, including circular, oval, square, rectangular, triangular, star shaped, key hole shaped, in the shape of a promoted object or logo, and the like. The aperture 118 can be included providing a means for securing a flavor packet, a decorative object, and the like to the containment arm 114.

[0057] An alternate exemplary embodiment is referred to as a fruit wedge containment device 300, being illustrated in FIG. 12. The fruit wedge containment device 300 is formed having a containment arm portion 310 extending angularly downward from a bottle rim coupling component 320. The containment arm portion 310 is formed having a frictional feature 312 disposed upon a containment arm 314. The frictional feature 312 is preferably a series of ridges along either the edges (as shown) of the center, or the entire fruit contacting surface of the containment arm 314. A vertical spring component 316 is preferably disposed between the bottle rim coupling component 320 and the containment arm 314, wherein the vertical spring component 316 is designed to rest against an interior surface of a neck 302 of a bottle 300 (FIGS. 9 and 10) and provide a sufficient spring support to the containment arm 314. The bottle rim coupling component 320 is formed having a circular bottle rim edge receiver 322 in the shape and size of the bottle rim 212 (FIGS. 9 and 10). It is preferred that a ring upper surface 326 of the circular bottle rim edge receiver 322 is rounded for comfort to the drinking party. The circular bottle rim edge receiver 322 can include features to secure the bottle rim coupling component 320 to the bottle rim 212, such as a bottle insertion ring 324. The bottle insertion ring 324 would extend downward, providing a frictional interface with the interior surface of the bottle rim 212. Alternately, the bottle insertion ring 324 can be formed in a clip shape, engaging with the bottle rim 212. The bottle insertion ring 324 can be circumferential orII spatially designed. It is understood the containment arm 114 can incorporate a non-linear side edge including notches, semi-circular cutouts, and the like.
[0058] The term promotional image 134 is representative of any type of image 134, including promotional images (logos, text, designs, etc.), personal identification, instructions, and the like. A user can apply a personal identification to the promotional surface 132 as a means for identifying their particular drink. The promotional image 134 can be presented upon the containment arm 114, the promotional surface 132 of the promotional medallion 130, or any other reasonable surface of the fruit wedge containment device 100. The image 134 can be printed, embossed, recessed, applied via decal, label, and the like.

[0059] Since many modifications, variations, and changes in detail can be made to the described preferred embodiments of the invention, it is intended that all matters in the foregoing description and shown in the accompanying drawings be interpreted as illustrative and not in a limiting sense. Thus, the scope of the invention should be determined by the appended claims and their legal equivalent.

What is claimed is:
1. A fruit wedge containment device, comprising:
   - a bottle rim coupling component comprising a rim clip feature being shaped to removably secure the wedge containment device to a rim of a bottle; and
   - an elongated containment arm extending angularly downward from the bottle rim coupling component at an angle for containing a fruit wedge between an interior surface of a neck of the bottle and a surface of the containment arm.

2. A fruit wedge containment device as recited in claim 1, wherein the bottle rim coupling component is formed having a curved upper section being of at least 180 degrees for gripping the rim of the bottle.

3. A fruit wedge containment device as recited in claim 1, wherein the bottle rim coupling component further comprises a secondary rim member contour.

4. A fruit wedge containment device as recited in claim 1, the bottle rim coupling component further comprising at least one bottle gripping member extending from an end of the rim clip feature for contacting a surface of the bottle downward from the bottle rim.

5. A fruit wedge containment device as recited in claim 4, wherein the at least one bottle gripping member is incorporated between an interior end of the rim clip feature an upper end of the containment arm.

6. A fruit wedge containment device as recited in claim 1, the wedge containment device further comprising a fruit securing feature disposed upon the bottle rim.

7. A fruit wedge containment device as recited in claim 1, the wedge containment device further comprising a hook disposed upon a distal end of the containment arm.

8. A fruit wedge containment device as recited in claim 6, the wedge containment device further comprising a bottle latch disposed upon a central portion of the containment arm, wherein the bottle latch works in conjunction with the hook to function as a bottle opener.

9. A fruit wedge containment device as recited in claim 1, the wedge containment device further comprising at least one aperture provided through the containment arm.

10. A fruit wedge containment device as recited in claim 1, the wedge containment device further comprising a promotional image.

11. A fruit wedge containment device, comprising:
    - a bottle rim coupling component comprising a rim clip feature being shaped to removably secure the wedge containment device to a rim of a bottle;
    - a vertical spring component extending downward from an interior end of the rim clip feature; and
    - an elongated containment arm extending angularly downward from a distal end of the vertical spring component at an angle for containing a fruit wedge between an interior surface of a neck of the bottle and a surface of the containment arm.

12. A fruit wedge containment device as recited in claim 11, wherein the bottle rim coupling component is formed having a curved upper section being of at least 180 degrees for gripping the rim of the bottle.

13. A fruit wedge containment device as recited in claim 11, wherein the bottle rim coupling component is formed in a shape selected from a group consisting of:
   a. an inverted “U” shape for securing over a section of the bottle rim,
   b. a partial “D” shape for securing over a section of the bottle rim,
   c. a rotated “C” shape for securing over a section of the bottle rim, and
   d. a circular shape being parallel to the bottle rim for resting upon an upper surface of the bottle rim.

14. A fruit wedge containment device as recited in claim 11, wherein the bottle rim coupling component further comprises a secondary rim member contour.

15. A fruit wedge containment device as recited in claim 11, the wedge containment device further comprising a hook disposed upon a distal end of the containment arm.

16. A fruit wedge containment device as recited in claim 11, the wedge containment device further comprising a promotional image.

17. A fruit wedge containment device, comprising:
    - a bottle rim coupling component comprising a rim clip feature being shaped to removably secure the wedge containment device to a rim of a bottle;
    - a rim clip extension projecting downward from an exterior end of the rim clip feature; and
    - an elongated containment arm extending angularly downward from the bottle rim coupling component at an angle for containing a fruit wedge between an interior surface of a neck of the bottle and a surface of the containment arm.

18. A fruit wedge containment device as recited in claim 17, wherein the bottle rim coupling component is formed having a curved upper section being of at least 180 degrees for gripping the rim of the bottle.

19. A fruit wedge containment device as recited in claim 17, the wedge containment device further comprising an image medallion disposed upon a distal end of the rim clip extension.

20. A fruit wedge containment device as recited in claim 19, the wedge containment device further comprising a promotional image disposed upon the image medallion.

21. A fruit wedge containment device as recited in claim 17, the wedge containment device further comprising a promotional image.

22. A fruit wedge containment device as recited in claim 17, the wedge containment device further comprising a hook disposed upon a distal end of the containment arm.

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